

## ABSTRACT

Method and system are disclosed for compensating for color variations due to thermal differences in LED based lighting systems. The method and system involves characterizing the LEDs to determine what PWM (pulse-width modulation) is needed at  
5 various operating temperatures to achieve a desired resultant color. The characterization data is then stored in the microprocessor either in the form of a correction factor or as actual data. When an operating temperature that is different from a calibration temperature is detected, the characterization data is used to adjust the PWM of the LEDs to restores the LEDs to the desired resultant color.